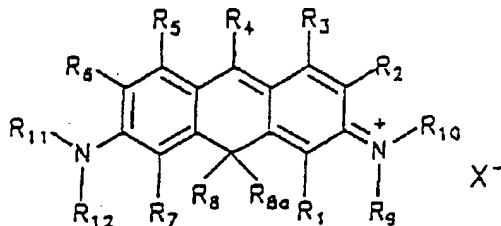


**AMENDMENTS TO THE CLAIMS WITH MARKINGS TO SHOW CHANGES  
MADE, AND LISTING OF ALL CLAIMS WITH PROPER IDENTIFIERS**

Claims 1-19 (Canceled)

20. (Currently amended) In an immunoassay or nucleic acid hybridization method for the detection of an analyte in a sample, the improvement which comprises using a labeled receptor for the analyte wherein the label is a compound ~~A method of detecting an analyte using labeling groups comprising the steps of: labeling the analyte with compounds of the general formula I~~



~~as labeling groups and utilizing in a procedure for detecting analytes:~~

wherein:

R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub>, R<sub>4</sub>, R<sub>5</sub>, R<sub>6</sub> and R<sub>7</sub> are, ~~in each case independently,~~ at least one of hydrogen, halogen, a hydroxyl, amino, sulfo, carboxyl or aldehyde group, a substituted or unsubstituted, saturated or unsaturated straight chain, branched or cyclic hydrocarbon alkyl group having up to 20 carbon atoms, ~~wherein the hydrocarbon groups include at least one of alkyl, alkenyl, alkynyl, cycloalkyl, or aryl,~~ a substituted or unsubstituted, aromatic ring

system; or, ~~one~~ two or more of adjacent the radicals  $R_1$ - $R_7$  groups, in each case together may form a ring system which ~~with adjacent substituents, said~~ ring system containing one or more multiple bonds;

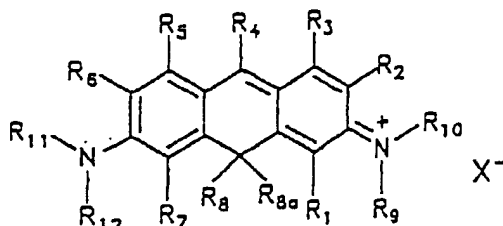
$R_8$  and  $R_{8a}$  are, ~~in each case independently, at least one of~~ a saturated or unsaturated, straight-chain, branched or cyclic ~~hydrocarbon~~ alkyl group having up to 20 carbon atoms, or  $R_8$  and  $R_{8a}$ , together, can form a ring system of one or more rings;

$R_9$ ,  $R_{10}$ ,  $R_{11}$  and  $R_{12}$ , ~~are in each case independently, at least one of~~ hydrogen, a substituted or unsubstituted, saturated or unsaturated, straight-chain, branched or cyclic ~~hydrocarbon~~ alkyl group having up to 20 carbon atoms, ~~optionally selected from a~~ polyether, substituted or unsubstituted phenyl or substituted or unsubstituted phenylalkyl having 1-3 carbon atoms in the alkyl chain, provided that any of these ~~which wherein the hydrocarbon~~ groups may optionally contain one or more atoms selected from the group consisting of ~~at least one of~~ heteroatoms selected from oxygen, sulfur or and nitrogen atoms, ~~and one or more substituents~~; or ~~one~~ two or more adjacent of the radicals  $R_9$ - $R_{12}$  groups, in each case together, ~~can~~ may form a ring system which ~~with adjacent substituents, said ring system~~ can contain one or more multiple bonds; with the proviso that if  $R_1$ - $R_3$  and  $R_5$ - $R_7$  are hydrogen and  $R_8$ ,  $R_{8a}$  and  $R_9$ - $R_{12}$  are methyl, then  $R_4$  is not one of hydrogen, hydroxyl, methyl, isopropyl, t-butyl, phenyl, o-tolyl, p-tolyl, 2,6-dimethylphenyl, 2-t-butylphenyl, 2-isopropenylphenyl and 4-dimethylaminophenyl;

wherein either or both of the groups  $-N(R_{11})(R_{12})$  and  $=N(R_9)(R_{10})$  can both be replaced by either ~~at least one of~~  $-OR_9$  and ~~or~~  $=O$ ;  
and X represents ~~optionally~~ a species of ~~anions~~ anion present for charge equalization.

21. (Currently amended) The method according to claim 20, wherein the ~~substituents of the hydrocarbon groups of  $R_1$ - $R_7$  are~~ optionally, substituted by a member selected from the group consisting of ~~at least one of~~ halogens, hydroxyl, amino, sulfo, phospho, carboxyl, aldehyde,  $C_1$ - $C_4$ -alkoxy, and  $C_1$ - $C_4$ -alkoxycarbonyl groups.
22. (Currently amended) The method according to claim 20, wherein the ~~substituents of the hydrocarbon groups of  $R_8$ - $R_{8a}$  are~~ optionally, substituted with a member selected from the group consisting of ~~at least one of~~ halogens, hydroxyl, amino, sulfo, phospho, carboxyl, aldehyde,  $C_1$ - $C_4$ -alkoxy and  $C_1$ - $C_4$ -alkoxycarbonyl groups.
23. (Currently amended) The method according to claim 20, wherein the ~~substituents of the hydrocarbon groups of  $R_9$ ,  $R_{10}$ ,  $R_{11}$  and  $R_{12}$  are~~ optionally, substituted with a member selected from the group consisting of ~~at least one of~~ halogens, hydroxyl, amino, sulfo, phospho, carboxyl, carbonyl, alkoxy and alkoxycarbonyl groups.

24. (Previously amended) The method as claimed in claim 20, wherein the compound I is covalently coupled to a receptor specific for an analyte to be detected.
25. (Previously amended) The method as claimed in claim 20, wherein the detection procedure is selected from nucleic acid hybridization procedures and immunochemical procedures.
26. (Currently Amended) A compound of the general formula I

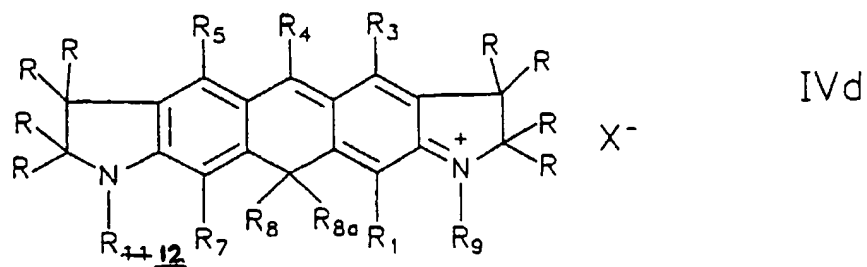
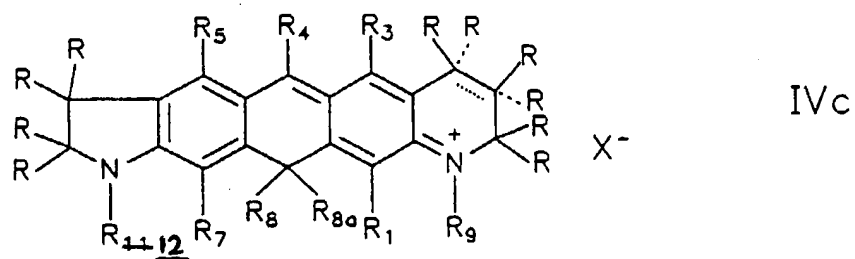
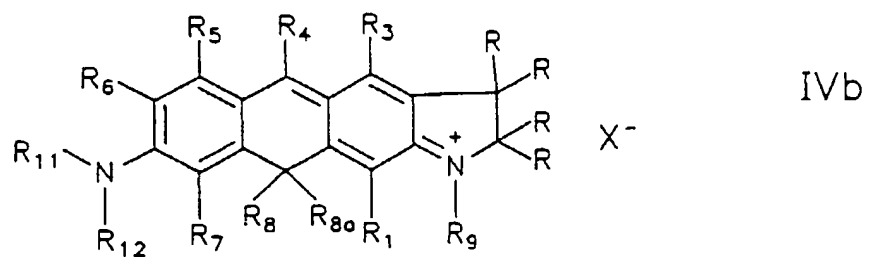
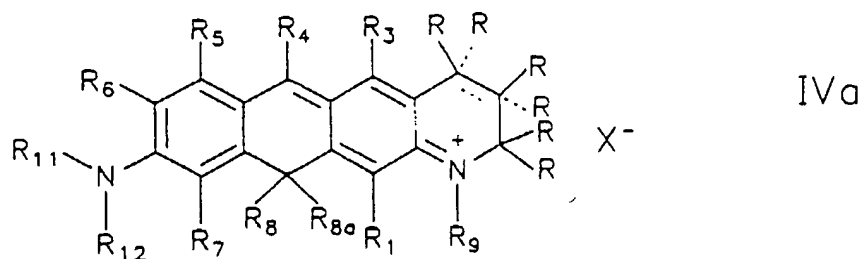


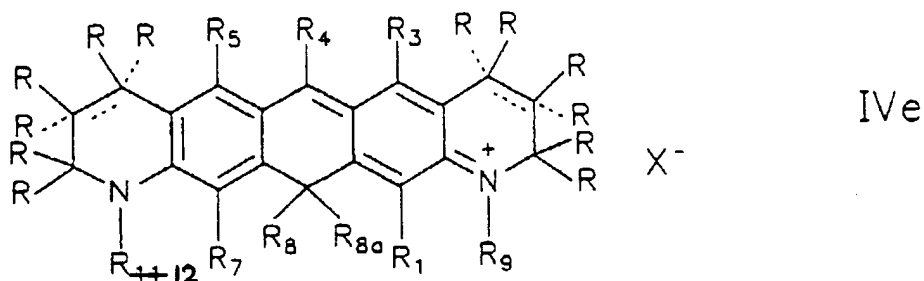
wherein  $R_1$ - $R_{12}$  and X are defined as in claim 20, with the proviso that if  $R_1$ - $R_3$  and  $R_5$ - $R_7$  are hydrogen and  $R_8$ ,  $R_{8a}$  and  $R_9$ - $R_{12}$  are methyl, then  $R_4$  is not one of hydrogen, hydroxyl, methyl, isopropyl, t-butyl, phenyl, o-tolyl, p-tolyl, 2,6-dimethylphenyl, 2-t-butylphenyl, 2-isopropenylphenyl and 4-diaminomethylphenyl 4-dimethylaminophenyl, and wherein at least one or more ring systems are formed by  $R_6$  is bridged bridging with  $R_{11}$ , and  $R_7$  bridging with  $R_{12}$ ; at least one of  $R_1$  is bridged bridging with  $R_9$   $R_{10}$  and/or  $R_2$  bridging with  $R_9$   $R_{10}$  to form a ring system.

Claim 27 (Canceled);

28. (Currently amended) The compound according to claim 26, wherein the ring system formed by bridging R<sub>6</sub> with R<sub>11</sub>, R<sub>7</sub> with R<sub>12</sub>, R<sub>1</sub> with R<sub>9</sub> or R<sub>2</sub> with R<sub>10</sub> ~~of~~ contains a 5-or 6-membered rings ring which contain one or more multiple bonds.
29. (Currently amended) The compound according to claim 26, wherein R<sub>4</sub> is hydrogen, C<sub>1</sub>-C<sub>6</sub>-alkyl or ~~a group containing~~ an aromatic ring system.
30. (Currently Amended) The compound according to claim 26, wherein R<sub>8</sub> and R<sub>8a</sub> are, ~~in each case~~ independently, ~~at least one of~~ methyl, ethyl and or phenyl.

31. (Currently amended) The compound according to claim 26, which corresponds to one of the general formulae IVa to IVe as follows:





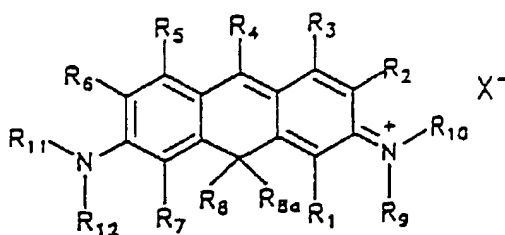
in which the broken lines represent optional ~~are optionally~~ double bonds, and when the double bond is present in the ring in the presence of the ~~double bonds~~ the radicals R bonded via a broken line are absent; R<sub>1</sub>, R<sub>3</sub>, R<sub>4</sub>, R<sub>5</sub>, R<sub>6</sub>, R<sub>7</sub>, R<sub>8a</sub>, R<sub>9</sub>, R<sub>11</sub>, R<sub>12</sub> and X are as previously ~~as in claim 20~~, and R in each occurrence, can be identical or different and is defined as R<sub>1</sub>-R<sub>7</sub> ~~in claim 20~~.

32. (Currently Amended) The compound according to claim 26 further comprising a group capable of covalent coupling the compound to a biomolecule.
33. (Currently Amended) The compound according to claim 32, wherein the coupling group is selected from the group consisting of ~~at least one of~~ -COOH, -NH<sub>2</sub>, -OH and -SH.
34. (Currently Amended) The compound according to claim 32 which is being coupled to at least one of a carrier and a biomolecule via one or more coupling groups.

35. (Currently Amended) The compound according to claim 34, wherein the carrier is selected from the group consisting of ~~at least one of~~ porous glass, ion exchange resins, dextrans, cellulose, cellulose derivatives and hydrophilic polymers.
36. (Currently Amended) The compound according to claim 34, wherein the biomolecule is selected from the group consisting of ~~at least one of~~ peptides, polypeptides, nucleotides, nucleosides, nucleic acids, nucleic acid analogs and haptens.

Claim 37 (Cancelled);

38. (Currently amended) A process for the preparation of compounds of the general formula I



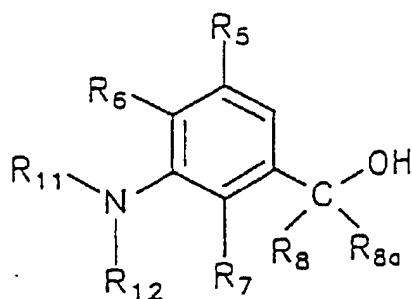
wherein R<sub>1</sub>-R<sub>12</sub> and X are defined as in claim 20, ~~with the proviso that both~~

~~N(R<sub>11</sub>)(R<sub>12</sub>) and =N(R<sub>9</sub>)(R<sub>10</sub>) are not replaced by -OR<sup>9</sup> or =O.~~

comprising the steps of:

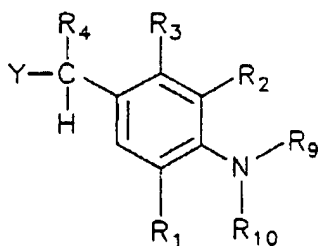
reacting one of a compound of the general formula II





II

in which R<sub>5</sub>, R<sub>6</sub>, R<sub>7</sub>, R<sub>8</sub>, R<sub>8a</sub>, R<sub>11</sub>, R<sub>12</sub> are as previously defined ~~as in claim~~  
 20, or the dehydration product of II, with a compound of the general  
 formula III



III

in which R<sub>1</sub>-R<sub>4</sub>, R<sub>9</sub> and R<sub>10</sub> are as previously defined and Y is a halogen,  
 in a suitable solvent, under acidic conditions and in the presence of a  
 catalyst; and reacting the compound formed by ring closure between one of  
 the compound II or its dehydration product, and the compound III, by  
 oxidation into the compound I.

39. (Previously presented) The process according to claim 38, wherein the  
 solvent is a nonpolar solvent, selected from one of methylene chloride, 1,2-  
 dichloroethane or chloroform.

40. (Previously presented) The process according to claim 38, wherein the catalyst is boron trichloride.
41. (Previously presented) The process according to claim 38, wherein the acid is selected from one of sulphuric acid, phosphoric acid or polyphosphoric acid.
42. (Previously presented) The process according to claim 38, wherein the oxidant is tetrabutylammonium(meta)periodate.
43. (Previously presented) The process according to claim 38, wherein the compound (I) is obtained in a one-step process and without isolation of intermediates.
44. (Currently Amended) The method of claim 20, wherein the ~~hydrocarbon~~ alkyl groups include at least one of phenyl and heteroaryl radicals as a substituent.
45. (Currently Amended) The method of claim 44, wherein the ~~hydrocarbon~~ aromatic ring system groups includes are at least one a heteroatom selected from oxygen, sulfur or nitrogen atoms and two or more substituents.

46. (Currently Amended) The method of claim 20, wherein the ~~at least one of a~~ saturated or unsaturated, straight-chain, branched or cyclic ~~hydrocarbon~~ alkyl group having up to 20 carbon atoms ~~are from~~ is a C<sub>4</sub>-C<sub>6</sub>-alkyl group selected from the group consisting of ~~at least one of~~ methyl, ethyl, propyl and butyl, ~~or an aryl or heteroaryl group.~~
47. (Currently Amended) The method of claim 20 46, wherein the aromatic ring system ~~aryl or heteroaryl group is phenyl, which~~ contains at least one of a heteratom selected from oxygen, sulfur or nitrogen atoms and one or more substituents.
48. (Currently Amended) The process of claim 38, wherein the halogen is selected from the group of bromine, chlorine or iodine ~~a hydroxyl or thiol group.~~
49. (Previous Presented) A conjugate for the detection of an analyte comprising a compound according to claim 26, which is covalently coupled to a receptor specific for an analyte to be detected.